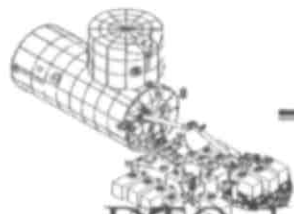


Rationale of JEM Activation Necessity

ITRG#7

June 10-14, 2002

JEM Project Team
NASDA



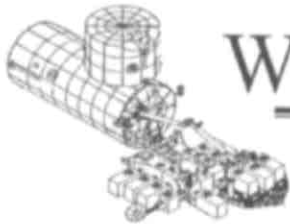
Interpretation of DTO INT-008

DTO describes **JEM-PM initialization should demonstrate the initial on-orbit activation(B-string racks) and redundant systems (A-string racks).**

1. Initial on-board activation (normal activation)
B string activation → A string activation
2. Redundancy activation (contingency activation)
A string activation

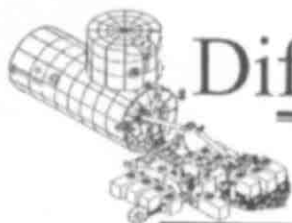
NASDA has already presented, that the interpretation above is included in the DTO at ITRG#5.

It is not a new requirement.



Why is A string activation so necessary ?

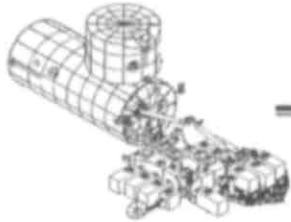
- Objectives of MEIT is to mitigate risk of potential defect in end-to-end functions, and in the integrated operation sceneries using flight system.
- Activation with B string and that with A string consists of unique functions and sequences, and then very important. Differences are shown in the following charts. JEM mission will be lost without successful activation.
- A-string activation test in MEIT-3 mitigates the Critical risks.



Differences Between Two types of Activation

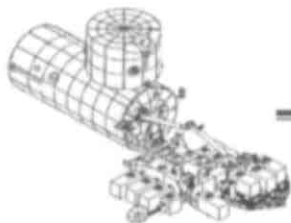
	Initial on-board activation (B&A)	Redundancy activation(A string)
Communication between C&CMDM and JEM	CB-EXT-2	CB-EXT-1
Thermal Loop	2WCL	1WCL-LTL
JCP/DIU-III	JCP- <u>b</u> /DIU-III- <u>b</u>	JCP- <u>a</u> /DIU-III- <u>a</u>

A-string activation is the only opportunity to verify CB-EXT-1 bus.

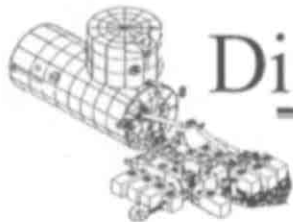


NASDA's Position

- Coordination has been completed in the reassessment discussion, to carry out the A-String activation test.
- If necessary, The other DTOs (except for Caution and warning, split screen function) should be deleted, rather than the A string activation, to keep up the schedule as planned.



Backup Charts



Differences Between Two types of Activation

Initial on-orbit activation	Redundant activation
B-string is success to be active.	B-string is fail to be active.
A-string power system activation.	A-string power system activation.
JCP-a is secondary power off (cold stand-by).	Reconfigure to TCS-L 1WCL
Active TCS-L loop (2WCL complete)	JCP-a is active to prime .